

Globelics Academy 2008

Organizational structures to support innovation: how do companies decide?

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Agenda

- Introduction / Research Question
- Conceptual Basis
 - ✓ Organizational Project - “Classical” Approach
 - ✓ Innovation-directed Organizational Project
 - ✓ Innovation as a process
- Methodology
 - ✓ Study Cases
- Discussions / Conclusions
- Further Development

Introduction / Research Question

- Innovation – Complex / Multidisciplinary process
- “Classical” organizational project - division of labor, need for supervision, single center of authority and control – suitable for stable environments
- Innovative environments – turbulent, uncertain and complex
- Need for agility and flexibility
- Organization and communication structures that encourage and make use of experience-based learning, knowledge sharing, and interaction – such as project teams, problem solving groups, and task rotation

Introduction / Research Question

- ...but it seems that:
 - ✓ Companies still adopt “classical” projects
 - ✓ Innovation not as a process
 - ✓ Focus only on R&D

Research Question

How should companies seeking to increase innovative capacity make decisions regarding innovation-directed structures?

Conceptual Basis

- Organizational Project - “Classical” Approach
 - ✓ “Classical” Organization
 - ✓ Efficiency driven
 - ✓ Organization suitable for stable environments
 - ✓ Division of labour
 - ✓ Single authority center
 - ✓ Need for control
 - ✓ Do not cope with flexibility and agility demanded by innovative environments

Conceptual Basis

- Innovation-directed Organizational Project
 - ✓ Need for flexible organizations capable of responding to environmental changes
 - ✓ Interaction and communication among employees
 - ✓ Decision-making agility
 - ✓ Flexibly defined roles

Conceptual Basis

- Innovation as a process
 - ✓ If not “classical” organization, then which one?
 - ✓ There is no “optimal” organization for all
 - ✓ Innovation should be considered as a process
 - ✓ ...*Not only R&D*

Conceptual Basis Synthesis

Characteristics	Definition	Indicators in company (Jensen <i>et al.</i> , 2007; Hansen & Birkinshaw, 2007)
<i>Analysis of the innovation value chain</i>	Assessment of which step in development constitutes the innovation bottleneck. Changes should be made considering the critical step and viewing the organization as a whole. <i>Hansen and Birkinshaw, 2007</i>	- Steps critical to innovation: Idea Generation Conversion Diffusion
<i>Flexibility and agility</i>	Adhocratic, organic, flexible structure, readily reacting to "events" and adapting to constantly changing environments <i>Mintzberg, 2003; Zarifian, 2001; Brown and Eisenhardt, 1997; Worley and Lawler III, 2006; Hatchuel and Weil, 1999</i>	- Decentralized decision-making - Low degree of formalization - Mutual adjustment between teams - Professionals specializing in their field, grouped by specialty
<i>Communication</i>	Innovation-directed structures should foster the development and diffusion of knowledge through experience and interaction. Such knowledge boosts the company's innovative capacity <i>Jensen et al., 2007</i>	- Integrated units - Flexible department/unit boundaries - Project teams with no unit coordination - Cooperation with clients

Methodology

- Qualitative Approach – Multiple Cases Study
- Innovative Brazilian Petrochemical company, undergoing organizational re-structuring, focusing on innovation
- A two-dimension approach was made to analyze interview data:
 - × Innovation-directed organizational structure before and after restructuring
 - × Analysis of two projects developed by company

Discussions / Conclusions

Characteristics of innovation-linked structures	Indicators in company	Indicators found at case company
<i>Analysis of the innovation value chain</i>	<ul style="list-style-type: none"> - Steps critical to innovation: Idea Generation Conversion Diffusion 	<ul style="list-style-type: none"> - <i>Conversion</i> and <i>diffusion</i> could be considered the critical steps, as shown by the analysis of NP1 and NP2.
<i>Flexibility and agility</i>	<ul style="list-style-type: none"> - Decentralized decision-making - Low degree of formalization - Mutual adjustment between teams - Professionals specializing in their field, grouped by specialty - Integrated units - Flexible department/unit boundaries - Project teams with no unit coordination - Cooperation with clients 	<ul style="list-style-type: none"> - Decisions centralized in those responsible for each functional unit - Formalized behavior with rules and procedures for innovative activity - R&D professionals grouped by specialty - Functions separated into departments and management units - Well-defined functions; strongly bounded responsibilities and roles, separated by area - Project teams are present, but are coordinated by functional area. - Clients propose ideas and assist in the innovation process; client relationship was considered overly focused on short-term projects. R&D and Customer Service are separate areas.
<i>Communication</i>		

Discussions / Conclusions

- Even after restructuring, most “classical” features remain
- There was no visible concern on the part of the company with analyzing innovation from a holistic standpoint
 - ✓ *Restructuring focused on R&D*
 - ✓ *Little involvement of other areas – Production/Marketing*
- Company’s innovation paradigm is still strongly based on formal, explicit knowledge of specialists in the field and R&D contributors, without consideration for the practical experience of line personnel (STI)

Further Development

- Paper was produced during “Work Organization for Innovation” classes
- First result of Doctoral Research
- Research Project – as in may/08:
 - ✓ Expand the research question, deepening in the reasons *why* companies decide upon organization for innovation in the way we found in this research
 - ✓ How internal (Strategic choice / structures) and external factors (Market, Industry, Institutional) interact in innovation development processes

Thank you very much!!

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Questions?
Discussion